

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
WATER QUALITY DIVISION

REPORT OF SAMPLING
HOOKER CHEMICAL COMPANY
Montague, Michigan

EPA Region 5 Records Ctr.



382386

June 24, 1982

On June 23, 1982, staff received a request from James Truchan of Environmental Enforcement Division to conduct an on-site inspection of the so called "no mans land" area located between the former C-56 production facility and Area IX. According to Truchan, Hooker had taken an additional 27,000 yd³ from this area and was claiming to have the area cleaned up. It was requested that an inspection be conducted on June 24, 1982, for confirmation.

On June 24, 1982, Gene Mogg and Dale DeKraker conducted the requested inspection. Prior to entering the area, contact was made with Mr. Brad Bundy to notify him of our intended entrance into the area. Bundy confirmed that the additional yardage had been removed and that the total amount of contaminated soil excavated from the area now totaled approximately 32,000 yd³. He further stated that the existing vault could not accept additional materials and was in the process of being capped with clay. All contaminated haul roads from "no mans land" had been removed and all equipment had been decontaminated. During the discussion with Mr. Bundy, Hooker's representative on site (Mr. Walt Powell) was also notified of our intended action but did not choose to accompany staff into the area during the inspection.

DeKraker and Mogg entered the area at approximately 9:30 a.m. Visual and olfactory observations were made at several locations within the excavated zone. In various locations, heavy visual staining was still apparent and olfactory observations indicated that the majority of the area was still heavily contaminated with C-56.

DeKraker and Mogg left the excavation at approximately 10:15 a.m. and returned to Bundy's office to call Truchan. Mogg informed Truchan that, in our opinion, the clean up was still not acceptable due to the nature of the contamination remaining. Truchan requested that soil samples be collected to confirm our observations.

At 11:00 a.m., Mogg and DeKraker returned to the area and collected six (6) soil samples from various locations within the excavation. A number of photographs were also taken to document the locations of the samples. The locations, descriptions and analytical results of these samples are as follows (see attached map also):

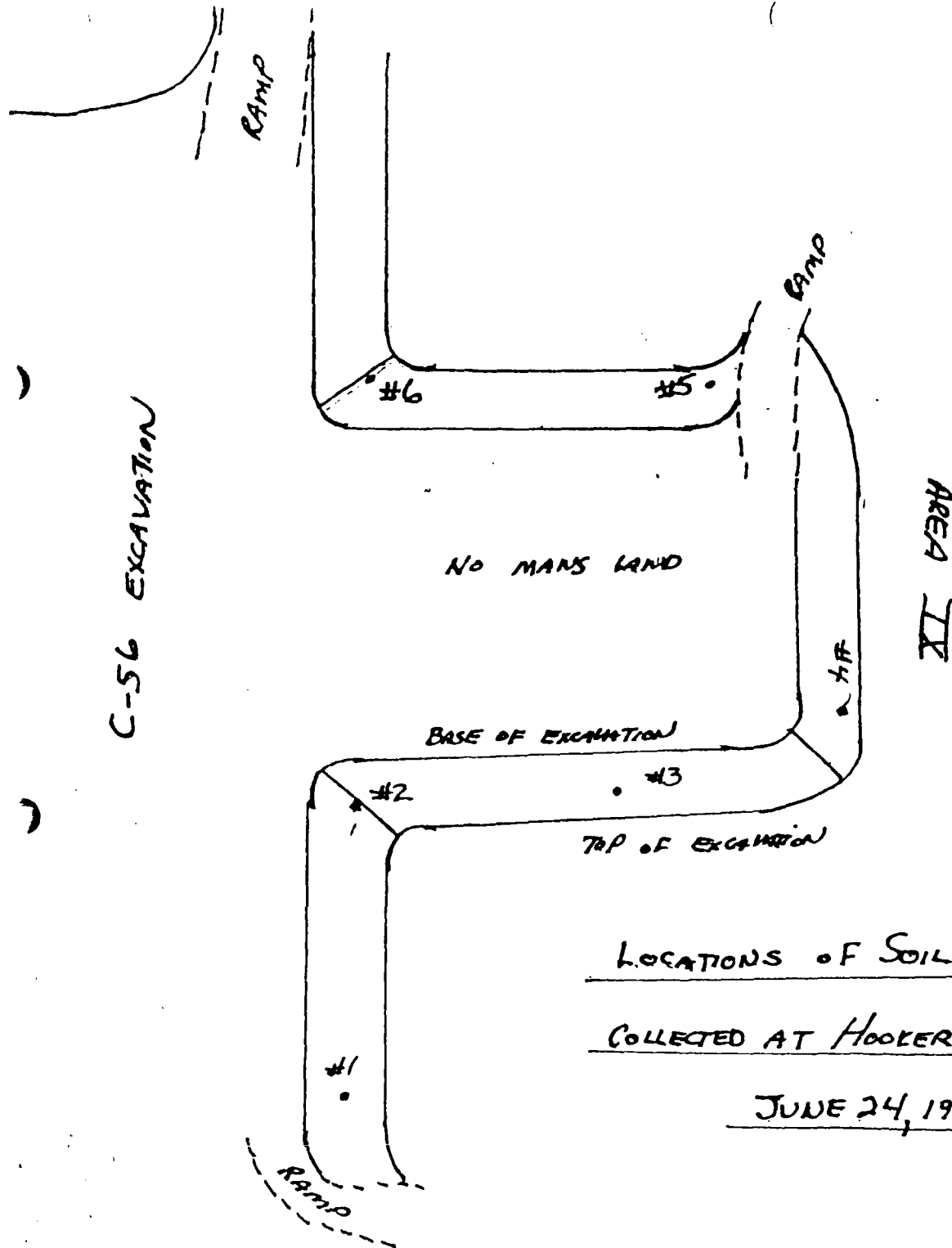
- 1) North wall of C-56 excavation near the east exit ramp. Depth of sample was approximately 20 feet below ground surface. Surface staining was evident and a strong C-56 odor was noted. Concentrations (in ppm) of C-46, C-56, C-58 and C-66 are 4.5, 41, 7.5 and 0.22 respectively (total 55.22 ppm = 0.005%).
- 2) Southeast corner of "no mans land" excavation at a depth of approximately 20 feet below ground surface. Coarse textured sand was present along with a strong C-56

Page 2
Report of Sampling
Hooker Chemical Company, Montague, Michigan
June 24, 1982

odor. An oily sheen was also noted on the soil surface. Concentrations of C-46, C-56, C-58 and C-66 (in ppm) are 13, 8.3, 72 and 11 respectively (total 104.3 ppm = 0.01%).

3. East wall of excavation equal distant between C-56 area and Area IX. Depth below surface is approximately 20 feet. Visual staining is apparent. Concentrations of C-56, C-58 and C-66 (in ppm) are 15, 6.2 and 0.03 respectively. Interference was encountered in the C-46 analysis thus total concentration cannot be determined.
- 4) Northeast corner of excavation adjacent to Area IX. Strong C-56 odor and slight oil stain noted on exposed sand. Depth below the base of Area IX is approximately ten feet. Concentrations of C-46, C-56, C-58 and C-66 (in ppm) are 25, 3100, 650 and 32 respectively (total 3807 ppm = 0.38%).
- 5) Northwest corner of excavation south of exit ramp. Soil is stained and has an oily sheen. Very strong C-56 odor. Depth is five feet below the ground surface. Concentrations of C-46, C-56, C-58 and C-66 (in ppm) are 570, 3900, 1300 and 240 respectively (total 6010 ppm = 0.6%).
- 6) Southwest corner of excavation approximately ten feet below surface grade. Slight oil stain and strong C-56 odor noted. Concentrations of C-46, C-56, C-58 and C-66 (in ppm) are 310, 1100, 790 and 1,100 respectively (total 3300 ppm = 0.3%).

DDK/mn
7/13/82



LOCATIONS OF SOIL SAMPLES

COLLECTED AT HOOKER CHEMICAL COMPANY

JUNE 24, 1982

LAB LOG# 9599 PROJ CODE W-1 COST CENTER ----- PR 2 COLLECTED BY M066 PCKRSON TRANSFERED TO Ymsprint RECEIVED AT LAB ----- EXAMINER -----

EXPLANATION: Hooker Chem - "NO MINS CAND"

SAMPLE
RELEASES

SEND RESULTS TO C.E. #00
(NAME & SECTION) DIIVISION

[illegible][illegible]

SITE DESCRIPTION/EXECUTIVE SUMMARY

Site Name:

Hooker Chemical Co.

Street Number & Name:

Old Channel Trail

City:

Montague

County: Muskegon

Michigan Code Number: 61-12N-17W-31A

DNR District: Grand Rapids

EPA ID Number: MID006014906

State:

Michigan

Zip Code:

49437

SAS Score/Screen No.: 415

This facility was a chemical manufacturer producing chlorine, acids, solvents and constituents used in pesticides and flame retardants. Process waste water sludges were periodically disposed into a sludge lagoon of about 15 acres from which contaminants migrated into ground and surface water, affecting several residential wells. Solid waste and sludge disposal areas have also contaminated soils and contributed to groundwater contamination. Under consent agreement most of the materials of concern have been excavated and placed in a clay-lined vault and a groundwater purge and treatment system installed. A large area of soil contaminated with C-56 and solvents remain.

Date of Previous Summary:
Previous Author:

Current Date: 12/21/84
Author: SLN

Site Assessment Unit
Groundwater Quality Division